

SUT in developing countries: compromising in statistical units

Topic: SUTs: issues and applications

Author: Bernd Struck

Co-Authors: Arif Cheema, Asif Bajwa

In contrast to IO-tables Supply and Use tables (SUT) are meant for empirical application, bringing together various data of different kind, periodicity and origin. In most developed countries SUT are just an interim step to achieve an input-output framework based on the concept of homogeneous production units. The statistical unit for SUT recommended in the SNA is the establishment. Yet, even OECD countries have to compromise in this regard as in a lot of cells the data stem from enterprise based surveys or from estimates.

In compiling SUT the developing countries are far from being in a comfortable situation to choose among statistical sources with different concepts of statistical units. In most developing countries the statistical system is meager and gaps in the data base are many. There is a vicious circle: Because of poor data the trust in the statistical agencies is limited. Suspicion of the statistical agencies tampering with the figures is common. Therefore, their courage and their propensity to estimate are low. Especially National Accounts figures often lack the necessary estimation adjustment for data gaps and for poor response. Consequently, trust in the figures deteriorates further.

Moreover, developed and developing countries differ in the structure of dimensions of the economic variables. While developed countries have a huge variety of products they usually make their output commensurable by collecting the data not only in quantities but also in value terms. In developing countries the diversity of production is limited and still most of the products are homogeneous as they are or stem from agricultural products. Hence, in a lot of branches output data in volume or quantity dimension prevail while prices and values have to be estimated.

Nevertheless, for the developing countries SUT are an excellent tool to encourage and to support estimates and to convince users from their necessity and their rationale. SUT also are a very useful tool to educate in understanding the inner consistency of the macro-economic framework called System of National Accounts.

However, for most developing countries the recommendation of the SNA to apply the establishment as the basic kind of unit for SUT is too challenging. One reason is that especially in agricultural production statistical measurement of output is product oriented. The predominantly small scale structure of agriculture does not even allow for collecting data via the units. And even if so: in the industrial classification almost all of them would fall under class "mixed farming" as in subsistence agriculture there is no specialization worth to be elaborated by means of SUT.

At the end of the day the mix of statistical units used for SUT is wider than for OECD-countries. It includes a lot of data accruing from a pure functional approach with no reference to whatsoever statistical unit at all. In practice, the interlocking of functional (products) and institutional concept (establishments and enterprises) creates a lot of problems but the explanatory and didactical beauty of SUT is worth coping with them.

During the next years things may improve. For branches outside agriculture there are tools now which support the application of establishments as the appropriate statistical units. One is the upcoming of statistical business registers in developing countries. The other is the introduction of Geographical Information Systems (GIS) into the toolbox of official statistics, the latter one being strengthened by Population Censuses carried out these years in a lot of countries as per recommendation of UN. GIS supports the idea of allocating data to local units / establishments as by its very nature its digital regional reference is spot-oriented. Linking GIS with business register information will be an attractive approach for developing countries. Consequently, the national data bases will tend towards the establishment to be the favorite kind of statistical unit.

The presentation will refer to experiences made in the context of strengthening Pakistan's national statistical system and in elaborating its SUT.